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In the Claims

For the convenience of the Examiner, all pending claims are set forth below, whether or not an amendment is made. Please amend the claims as follows:

1.   (Amended) A speech recognition apparatus comprising:

a store of data containing entries to be identified and <u>recognition</u> information defining for each entry a connection with a word of a first [set of words] <u>vocabulary</u> and a connection with a word of a second [set of words:] <u>vocabulary;</u>

speech recognition means; and

control means operable:

(a)   to control the speech recognition means to identify, by reference to recognition information for the first [set of words] <u>vocabulary,</u> as many words of the first [set as] <u>vocabulary</u> meet a predetermined criterion of similarity to first received voice signals;

(b)   upon such identification, to compile a <u>reduced</u> list of [all] words [of] <u>from</u> the second [set] <u>vocabulary, wherein the reduced list comprises only words from the second vocabulary</u> which are connected with [entries connected also with] the identified [word(s)] <u>words</u> of the first [set] <u>vocabulary;</u> and

(c)   to control the speech recognition means as to identify, by reference to recognition information for the second [set of words] <u>vocabulary,</u> at least one word of the <u>reduced</u> list which resembles second received voice signals.

2.   (Amended) A speech recognition apparatus as in claim 1, in which:

the speech recognition means is operable upon receipt of the first voice signal to generate for each identified word a measure of similarity with the first voice signal, and

the control means is operable to generate for each word of the <u>reduced</u> list a measure obtained from the measures for the relevant words of the first [set] <u>vocabulary,</u> and

the speech recognition means is operable upon receipt of the second voice signal to perform the identification of one or more words of the <u>reduced</u> list in accordance with a recognition process weighted in dependence on the measures generated for the words of the <u>reduced</u> list.

3.   (Amended) A speech recognition apparatus as in claim 2 in which:

the control means is operable to weight the measure for each word of the <u>reduced</u> list by a factor dependent on the number of words of the second [set] <u>vocabulary</u> which are connected with entries connected also with the relevant identified word of the first [set] <u>vocabulary</u>.

4.   (Amended) A speech recognition apparatus as in claim 2 in which:

the control means is operable to omit from the <u>reduced</u> list those words of the second [set] <u>vocabulary</u> having a measure below a predetermined threshold.

5.   (Amended) A speech recognition apparatus as in claim 1 in which:

the apparatus includes a store containing recognition data for all words of the second [set] <u>vocabulary</u>, and

the control means is operable following the compilation of the <u>reduced</u> list and before recognition of the words [, of] <u>from</u> the <u>reduced</u> list, to mark in the recognition data store those items of data therein which   correspond to the words not in the <u>reduced</u> list or those which correspond to words which are in the <u>reduced</u> list,

whereby the recognition means may ignore all words so marked or, respectively, not marked.

6.   (Amended) A speech recognition apparatus as in claim 1 in which:

the control means is operable following the compilation of the <u>reduced</u> list to generate recognition data for each word of the <u>reduced</u> list.

7.   (Amended) A speech recognition apparatus as in claim 1 in which:

the control means is operable to select for output entries defined as connected both with an identified word of the first [set] <u>vocabulary</u> and an identified word of the second [set] <u>vocabulary</u>.

8.   (Amended) A speech recognition apparatus as in claim 1 in which:

the store of data also contains <u>recognition</u> information defining for each entry a connection with a word of a third [set of words] <u>vocabulary</u>, and

the control means is operable:

(d)   to compile a <u>second reduced</u> list of all words of the third [set] <u>vocabulary, wherein the second reduced list comprises only words from the third vocabulary</u> which are connected with [entries also connected both with] an identified word of the first [set] <u>vocabulary</u> and an identified word of the second [set] <u>vocabulary</u>; and

(e)   to control the speech recognition means to identify, by reference to recognition information for the third [set of words] <u>vocabulary</u>, at least one word of the <u>second reduced</u> list which resembles third received voice signals.

9.   (Amended) A speech recognition apparatus as in claim 1 including:

means to store at least one of the received voice signals,

the apparatus being arranged to perform an additional recognition process in which the control   means is operable:

(a)   to control the speech recognition means to identify, by <u>the</u> reference to recognition information for one [set of words] <u>vocabulary</u>, a plurality of words of that [set] <u>vocabulary</u> which meet a predetermined criterion of similarity to the respective received voice signals;

(b)   to compile an additional list of all words of another [set] <u>vocabulary</u> which are connected with entries connected also with the identified words of the one [set] <u>vocabulary</u>; and

(c)   to control the speech recognition means to identify, by reference to recognition information for the other [set of words] <u>vocabulary</u>, at least one word of [the] said additional list which resembles the respective received voice signals.

10.   (Original) A speech recognition apparatus as in claim 9 including:

means to recognise a failure condition and to initiate the said additional recognition process only in the event of such failure being recognised.

11.   (Amended) A speech recognition apparatus as in claim 1 further comprising:

a telephone line connection; and

means responsive to receipt via the telephone line connection of signals indicating the origin or destination of a telephone call to access stored information identifying a subset of at least one of the said [sets of words] vocabularies and to restrict to that subset the operation of the speech recognition means for that [set] vocabulary.

Cancel claim 12.

Cancel claim 13.

Cancel claim 14.

Cancel claim 15.

Cancel claim 16.

Cancel claim 17.

Cancel claim 18.

Cancel claim 19.

20.   (Amended) A speech recognition apparatus comprising:

a store defining a first [set of words] vocabulary;

a store defining a second [set of words] vocabulary;

a store containing entries to be identified;

a store containing information relating each entry to a word of the first [set] vocabulary and to a word of the second [set] vocabulary;

speech recognition means operable upon receipt of a first voice signal to identify as many words of the first [set] vocabulary as meet a predetermined recognition criterion;

means to generate a reduced list of all words of the second [set] vocabulary which are related to an entry to which the identified word(s) of the first [set] vocabulary is also related; and

speech recognition means operable upon receipt of a second voice signal to identify at least one word of the reduced list.

21.   (Amended) A recognition apparatus comprising:

a store defining a first set of patterns;

a store defining a second set of patterns;

a store containing entries to be identified;

a store containing information relating each entry to a pattern of the first set and to a pattern of the second set;

recognition means operable upon receipt of a first input pattern [signal] signals to identify as many patterns of the first set as meet a predetermined recognition criterion;

means to generate a reduced list of all patterns of the second set which are related to an entry to which an identified pattern of the first set is also related; and

recognition means operable upon receipt of a second input pattern signal to identify at least one pattern of the reduced list.

22.   (Amended) A speech recognition apparatus comprising:

(i)   a store of data containing entries to be identified and information defining for each entry a connection with a signal of a [first] set of signals and a connection with a word of a [second set of words] vocabulary;

(ii)   means for identifying a received signal as corresponding to as many of the [first] set of signals as meet a predetermined criterion;

(iii)   control means operable to compile a reduced list of all words of the [second set] vocabulary which are connected with entries connected also with the identified signal of the [first] set of signals; and

(iv)   speech recognition means operable to identify, by reference to recognition information for the [second set of words] vocabulary, at least one word of the reduced list which resembles received voice signals.

23.   (Amended) A speech recognition apparatus as in claim 22 in which:

the [first] set of signals are voice signals representing spelled versions of the words of the [second set] vocabulary or portions thereof, and

the identifying means includes the speech recognition means operating by reference to recognition information for the said spelled voice signals.

24.   (Amended) A speech recognition apparatus as in claim 22 in which:

the [first] set of signals are signals consisting of tones and the identifying means is a tone recogniser.

25.   (Amended) A speech recognition apparatus as in claim 22 in which:

the [first] set of signals are signals indicating the origin or destination of the received signal.

26.   (Twice Amended) A method of identifying entries in a store of data by reference to stored information defining connections between entries and words, said method comprising:

(a)   identifying one or more of the said words as present in received voice signals;

([c] b) compiling a <u>reduced</u> list of those of the said words connected with entries connected also with the identified words; and

(c)   identifying at least one of the words of the <u>reduced</u> list as present in the received voice signals.

27.   (Amended) A speech recognition apparatus comprising:

a)   a store of data containing entries to be identified and information defining for each entry a connection with at least two words;

b)   a speech recognition means able to identify by reference to stored recognition information for a defined set of words, at least one word or word sequence which meets some predefined criterion of similarity to a received voice signal;

(c)   a control means operable [:] ;

i)   [to] <u>a</u> compile a <u>reduced</u> list of words which are connected with entries connected with a word previously identified by the speech recognition means; and

ii)   to control the speech recognition means to identify, by reference to recognition information for the [compiled lists] <u>reduced list</u>, at least one word or word sequence which resembles a further received voice signal.

Cancel claim 28.

Cancel claim 29.

Cancel claim 30.

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Cancel claim 31.

Cancel claim 32.

Cancel claim 33.

34.   (Amended)   An interactive voice recognition and response method for identifying at least one stored data base item comprising plural classes of mutually inter-related sub-items, said method comprising:

(a)   issuing a synthesized voice request for a first speech input representing a first class of sub-item;

(b)   performing speech recognition of said first speech input to identify at least one potentially corresponding first sub-item;

(c)   issuing a synthesized voice request for a second speech input representing a second class of sub-item;

(d)   compiling a <u>reduced</u> list of second sub-items mutually inter-related with said identified first sub-item(s); and

(e)   performing speech recognition of said second speech input with respect to said [compiled] <u>reduced</u> list to identify at least one potentially corresponding second sub-item from said <u>reduced</u> list.

35.   (Original) A method as in claim 34 wherein steps c and d are at least in part concurrently performed.

36.   (Original) A method as in claim 34 wherein the speech recognition of step b is performed with respect to a sub-set of the first class of sub-items.

37.   (Original) A method as in claim 36 wherein said sub-set is chosen based on an identified origin or destination location of said first speech input.

Cancel claim 38.

Cancel claim 39.

Cancel claim 40.

Cancel claim 41.

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Cancel claim 51.

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